



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: US/10/658,355
Source: Q12C
Date Processed by STIC: 9-22-03

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/658,355

DATE: 09/22/2003

TIME: 13:32:53

Input Set : E:\923seq.001

Output Set: N:\CRF4\09222003\J658355.raw

3 <110> APPLICANT: Gantier, Rene
 4 Guyon, Thierry
 5 Hugo, Cruz Ramos
 6 Vega, Manuel
 7 Drittanti, Lila
 9 <120> TITLE OF INVENTION: Rational Directed Protein Evolution Using Two Dimensional
 Rational
 10 Mutagenesis Scanning
 12 <130> FILE REFERENCE: 38751-923
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/658,355
 C--> 15 <141> CURRENT FILING DATE: 2003-09-08
 17 <150> PRIOR APPLICATION NUMBER: 60/457,063
 W--> 18 <151> PRIOR FILING DATE: 21-MAR-2003 → Year-month-day
 20 <150> PRIOR APPLICATION NUMBER: 60/410,258
 W--> 21 <151> PRIOR FILING DATE: 09-SEP-2002 → Year-month-day
 23 <160> NUMBER OF SEQ ID NOS: 501
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0

Does Not Comply
 Corrected Diskette Needed

ERRORED SEQUENCES

5925 <210> SEQ ID NO: 192
 5926 <211> LENGTH: 80
 5927 <212> TYPE: DNA
 5928 <213> ORGANISM: Artificial Sequence
 5930 <220> FEATURE:
 5931 <223> OTHER INFORMATION: IFN alpha-2b 80 bp 5' Primer
 5933 <400> SEQUENCE: 192
 5934 cccaagctta tggccttgac ctttgcttta ctggtggccc tctggtgct cagctgcaag 60
 E--> 5935 tcaagctgct ctgtgggctg → 80
 11447 <210> SEQ ID NO: 387
 11448 <211> LENGTH: 166
 11449 <212> TYPE: PRT
 11450 <213> ORGANISM: Homo sapiens
 E--> 11452 <400> SEQUENCE: 397-387
 11453 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
 11454 1 5 10 15
 11455 Cys Gln Lys Leu Leu Trp Gln Asp Asn Gly Arg Leu Glu Tyr Cys Leu
 11456 20 25 30
 11457 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
 11458 35 40 45
 11459 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
 11460 50 55 60
 11461 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn

different sequence numbers

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Input Set : E:\923seq.001

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11462 65          70          75          80
11463 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
11464          85          90          95
11465 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
11466          100         105         110
11467 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
11468          115         120         125
11469 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
11470          130         135         140
11471 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
11472 145          150         155         160
11473 Thr Gly Tyr Leu Arg Asn
11474          165

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13506 <210> SEQ ID NO: 458

13507 <211> LENGTH: 166

13508 <212> TYPE: PRT

13509 <213> ORGANISM: Homo sapiens

E--> 13511 <400> SEQUENCE: 358 458

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13512 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
13513 1          5          10         15
13514 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
13515          20         25         30
13516 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
13517          35         40         45
13518 Gln Phe Gln Lys Glu Asp Ala Leu Thr Ile Tyr Glu Met Leu Gln
13519          50         55         60
13520 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
13521 65          70          75          80
13522 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Lys Asn
13523          85          90          95
13524 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
13525          100         105         110
13526 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
13527          115         120         125
13528 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
13529          130         135         140
13530 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
13531 145          150         155         160
13532 Thr Gly Tyr Leu Arg Asn
13533          165

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13535 <210> SEQ ID NO: 459

13536 <211> LENGTH: 166

13537 <212> TYPE: PRT

13538 <213> ORGANISM: Homo sapiens

E--> 13540 <400> SEQUENCE: 359 459

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13541 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
13542 1          5          10         15
13543 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
13544          20         25         30

```

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DATE: 09/22/2003

PATENT APPLICATION: US/10/658,355

TIME: 13:32:54

Input Set : E:\923seq.001

Output Set: N:\CRF4\09222003\J658355.raw

```

13545 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
13546          35                      40                      45
13547 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
13548          50                      55                      60
13549 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Thr Gly Trp Asn
13550 65                      70                      75                      80
13551 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Asn Asn
13552          85                      90                      95
13553 His Leu Lys Thr Val Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
13554          100                     105                     110
13555 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
13556          115                     120                     125
13557 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
13558          130                     135                     140
13559 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
13560 145                     150                     155                     160
13561 Thr Gly Tyr Leu Arg Asn
13562          165

```

E--> 14289 <210> SEQ ID NO: 385 → 485

14290 <211> LENGTH: 166

14291 <212> TYPE: PRT

14292 <213> ORGANISM: Homo sapiens

E--> 14294 <400> SEQUENCE. 485

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14295 Met Ser Tyr Asn Leu Leu Gly Phe Leu Gln Arg Ser Ser Asn Phe Gln
14296 1          5                      10                      15
14297 Cys Gln Lys Leu Leu Trp Gln Leu Asn Gly Arg Leu Glu Tyr Cys Leu
14298          20                      25                      30
14299 Lys Asp Arg Met Asn Phe Asp Ile Pro Glu Glu Ile Lys Gln Leu Gln
14300          35                      40                      45
14301 Gln Phe Gln Lys Glu Asp Ala Ala Leu Thr Ile Tyr Glu Met Leu Gln
14302          50                      55                      60
14303 Asn Ile Phe Ala Ile Phe Arg Gln Asp Ser Ser Ser Thr Gly Trp Asn
14304 65                      70                      75                      80
14305 Glu Thr Ile Val Glu Asn Leu Leu Ala Asn Val Tyr His Gln Ile Asn
14306          85                      90                      95
14307 His Leu Lys Thr Arg Leu Glu Glu Lys Leu Glu Lys Glu Asp Phe Thr
14308          100                     105                     110
14309 Arg Gly Lys Leu Met Ser Ser Leu His Leu Lys Arg Tyr Tyr Gly Arg
14310          115                     120                     125
14311 Ile Leu His Tyr Leu Lys Ala Lys Glu Tyr Ser His Cys Ala Trp Thr
14312          130                     135                     140
14313 Ile Val Arg Val Glu Ile Leu Arg Asn Phe Tyr Phe Ile Asn Arg Leu
14314 145                     150                     155                     160
14315 Thr Gly Tyr Leu Arg Asn
14316          165

```

E--> 14318 <210> SEQ ID NO: 486

> different sequence number

VERIFICATION SUMMARYPATENT APPLICATION: **US/10/658,355**

DATE: 09/22/2003

TIME: 13:32:55

Input Set : **E:\923seq.001**Output Set: **N:\CRF4\09222003\J658355.raw**

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:21 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD
L:5935 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:80 SEQ:192
L:5967 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:5971 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:195
L:5975 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:195
L:5976 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:195 after pos.:0
L:11452 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:387 differs:397
L:13511 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:458 differs:358
L:13540 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:459 differs:359
L:14289 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQ ID NO: 385
L:14294 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:385 differs:485
L:14318 M:216 E: (34) Seq.#s missing, SEQ ID NOS: 386 thru 485